

The listing of the claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (Currently Amended): Method for nozzle-jetting oxygen into a synthesis reactor, e.g. for oxy-dehydration, for largely axial flow of the gas mixture through a catalyst bed-  
~~having the distinctive feature that,~~ wherein the oxygen is fed to a ring distributor system arranged above the catalyst bed in pure form, as air mixed with inert gas or water vapour and is jetted on to the catalyst surface through several exit openings in the ring distributor at an inclined angle from the vertical.

Claim 2 (Currently Amended): Method ~~as per~~ according to claim 1, ~~having the distinctive feature that~~ wherein the jetting of the oxygen is taken up in a direction on to the reactor center and/or in direction on to the reactor wall and/or in a tangential alignment.

Claim 3 (Currently Amended): Method ~~as per~~ according to claim 1 ~~or 2,~~ ~~having the distinctive feature that~~ wherein the

jetting of the oxygen takes place in tangential alignment and for each ring of the ring distributor in alternating alignment from ring to ring of the ring distributor.

Claim 4 (Currently Amended): Method ~~as per~~ according to one of the previous claims claim 1, ~~having the distinctive feature that~~ wherein the jetting of the oxygen takes place in a plane approximately 50-300 mm above the catalyst bed, which ensures an oxygen dwelling time of  $\leq 1$  second in the space above the catalyst bed.

Claim 5 (Currently Amended): Device for nozzle-jetting oxygen into a synthesis-reactor, e.g. for oxy-dehydration, with largely axial flow of the gas mixture through a catalyst bed, especially for conducting the method according to ~~one of the previous claims claim 1~~, ~~having the distinctive feature that~~ wherein there is a ring distributor consisting of several concentric ring pipes(7) provided with exit openings (6) above a catalyst bed (3), where the exit openings (6) are designed for jetting the oxygen on to the catalyst surface at an angle inclined away from the vertical.

Claim 6 (Currently Amended): Device ~~as per~~ according to claim 5 with a central gas inlet pipe that centrically penetrates that catalyst bed and with a mixing dome above the catalyst ~~be~~ bed, ~~having the distinctive feature that~~ wherein there is an oxygen ring distributor (7) surrounding the centric gas guiding pipe (2).

Claim 7 (Currently Amended): Device ~~as per~~ according to claim 5 ~~or 6~~, ~~having the distinctive feature that~~ wherein the ring distributor ~~if~~ is formed with several co-axially positioned ring ~~piupes~~ pipes (7) with gas exit openings (6) that ensure a gas flow in the direction on to the reactor center and/or reactor wall and/or in tangential direction.

Claim 8 (Currently Amended): Device ~~as per~~ according to claim 5 ~~or one of the following claims~~, ~~having the distinctive feature that~~ wherein adjacent gas exit openings (6) have a different flow outlet directions.

Claim 9 (Currently Amended): Device ~~as per~~ according to claim 5 ~~or one of the following claims~~, ~~having the distinctive feature that~~ wherein the gas exit openings (6) are aligned in

alternating sequence to adjacent exit openings ~~off~~ of an adjacent ring pipe.

Claim 10 (Currently Amended): Device ~~as per~~ according to claim 5 ~~or of the following claims,~~ ~~having the distinctive feature that~~ wherein the gas exit openings (6) are designed as holes or nozzles.